VERY TECH TRIP DEMO

Powered by OVHcloud

I save on my bills by monitoring my linky meter.

Hello !

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Victor2103

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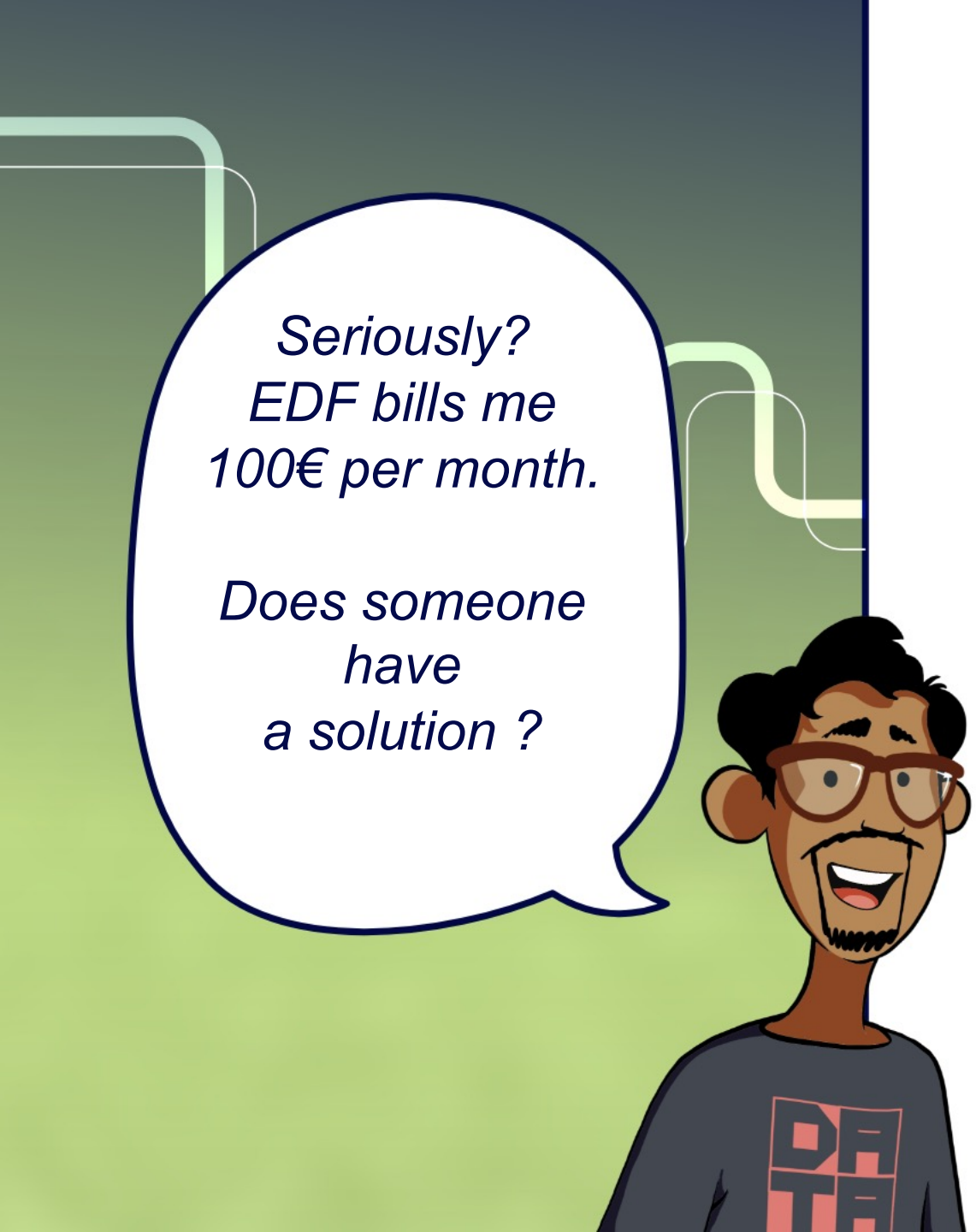
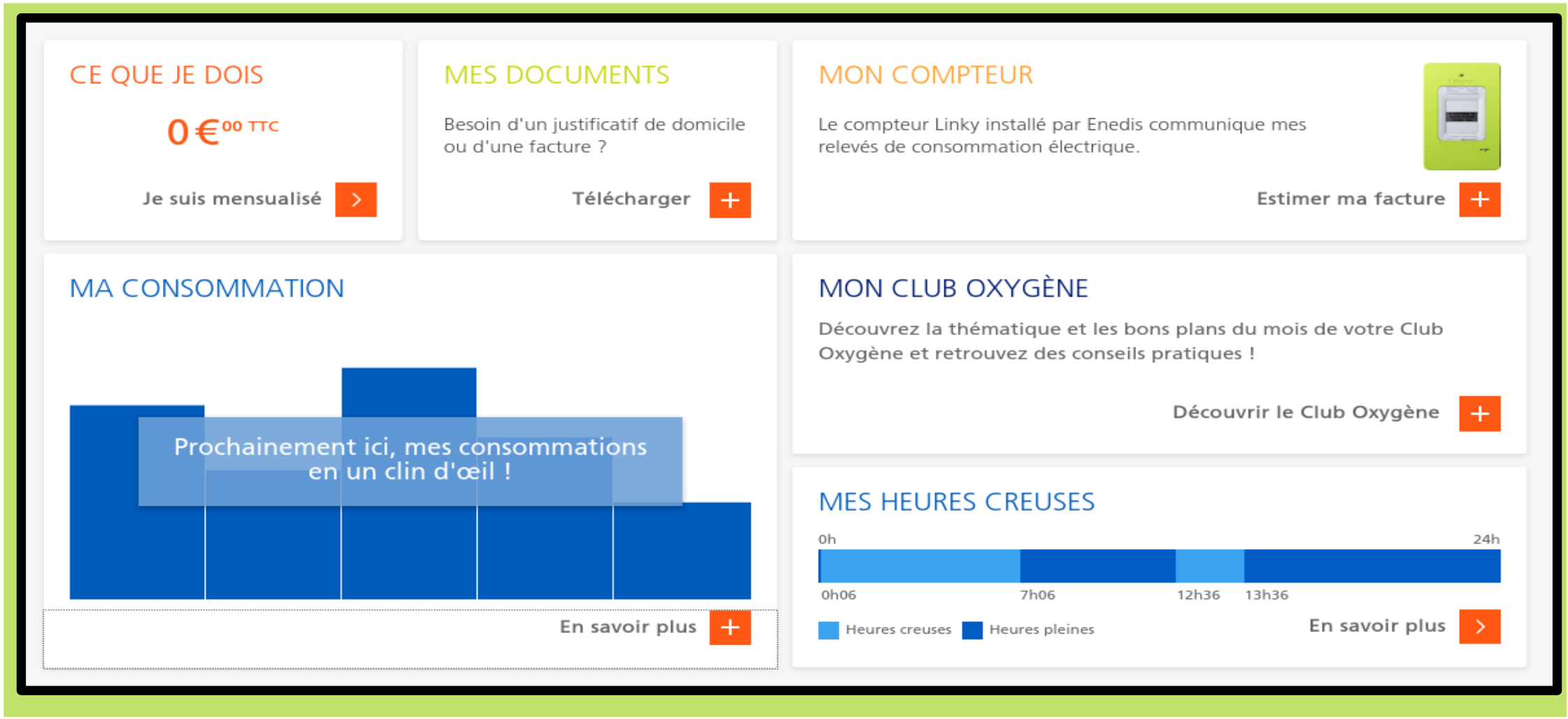


Why monitoring my bills ?

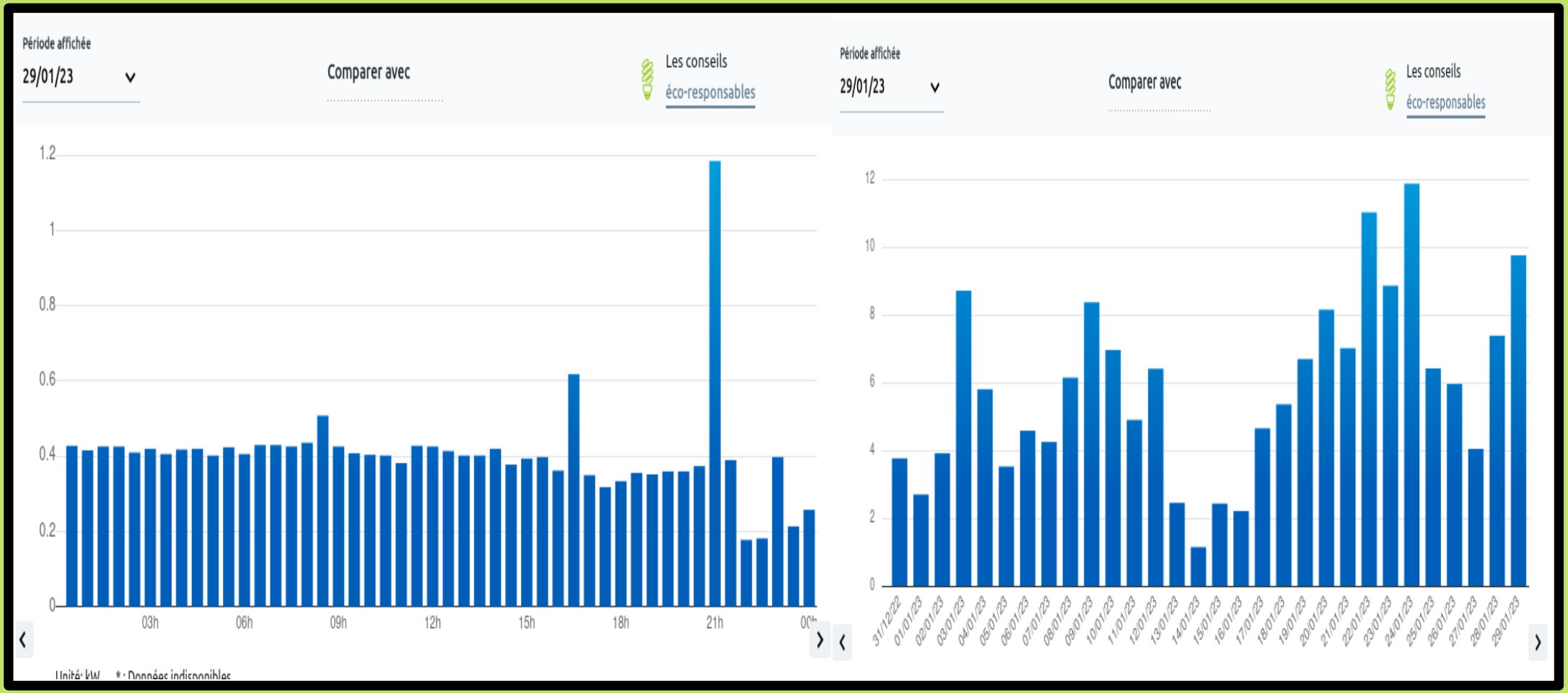
- ✓ Limit my consumptions
- ✓ Get some alert when abnormal activity
- ✓ And much more … sky is the limit :)

Why not using the EDF or Enedis app ?

Official App : EDF



Official App : Enedis



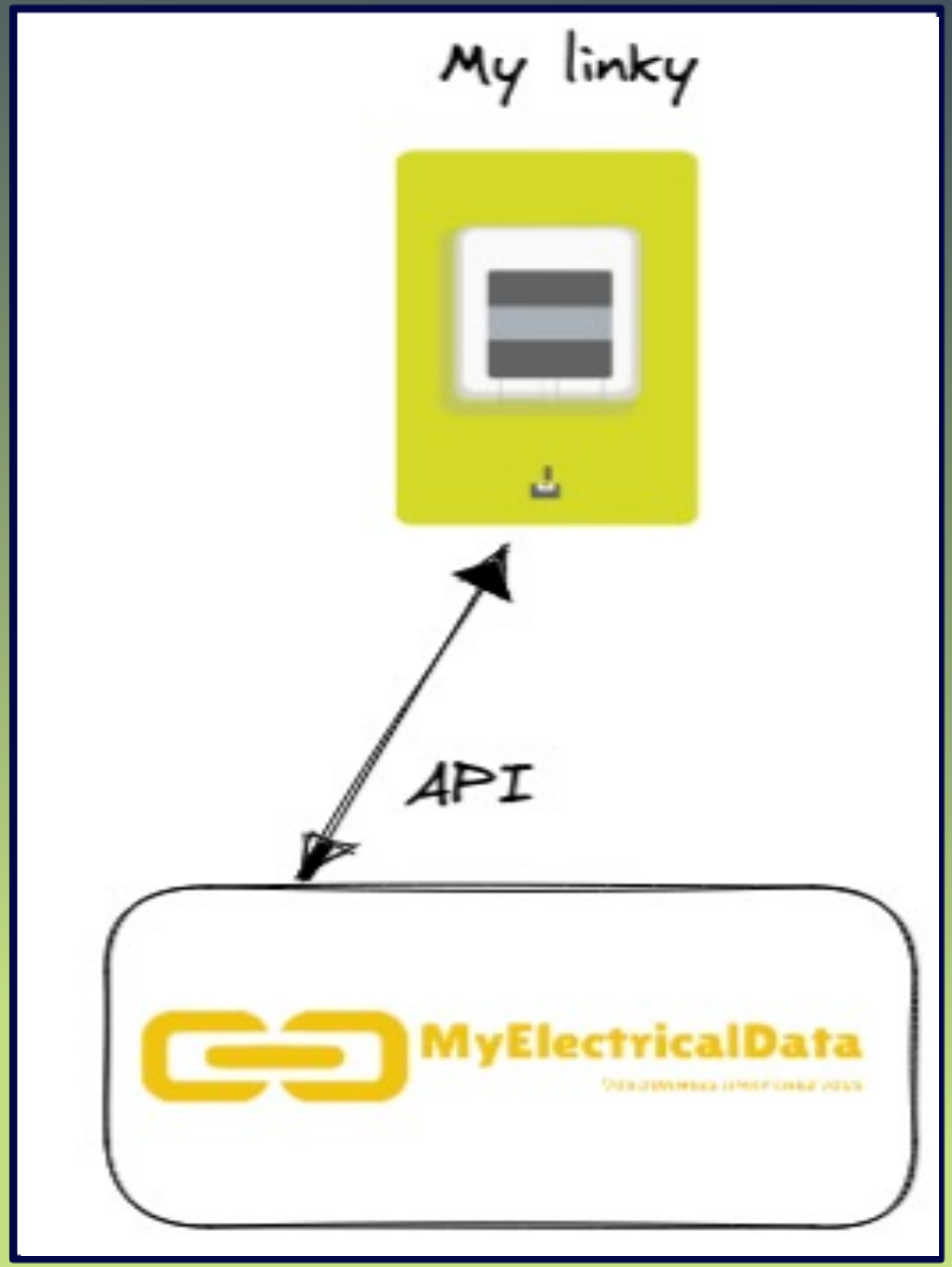

I want more !
• More accuracy, per minutes
• Bills forecast in euros
• Alerting
• Better dashboard visualization
• ….
Good luck…
DA
TA

Step 1 : get my Linky data

Can i get access to Enedis API ???

My Electrical Data to the rescue
https://myelectricaldata.fr/

And now ?



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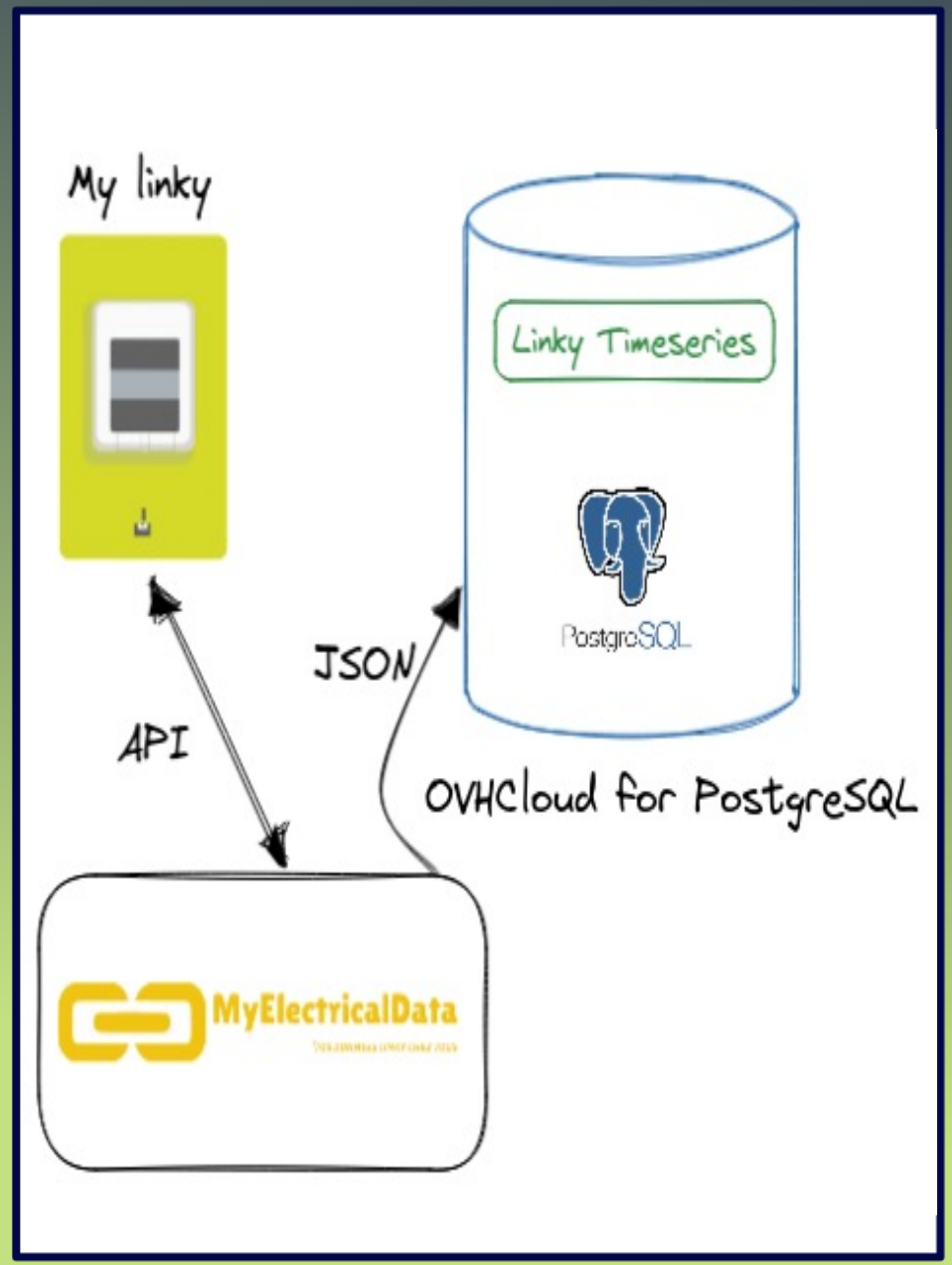
Step 2 : store my data

Ideas to store timeseries

- PostgreSQL and TimescaleDB
- InfluxDB ?

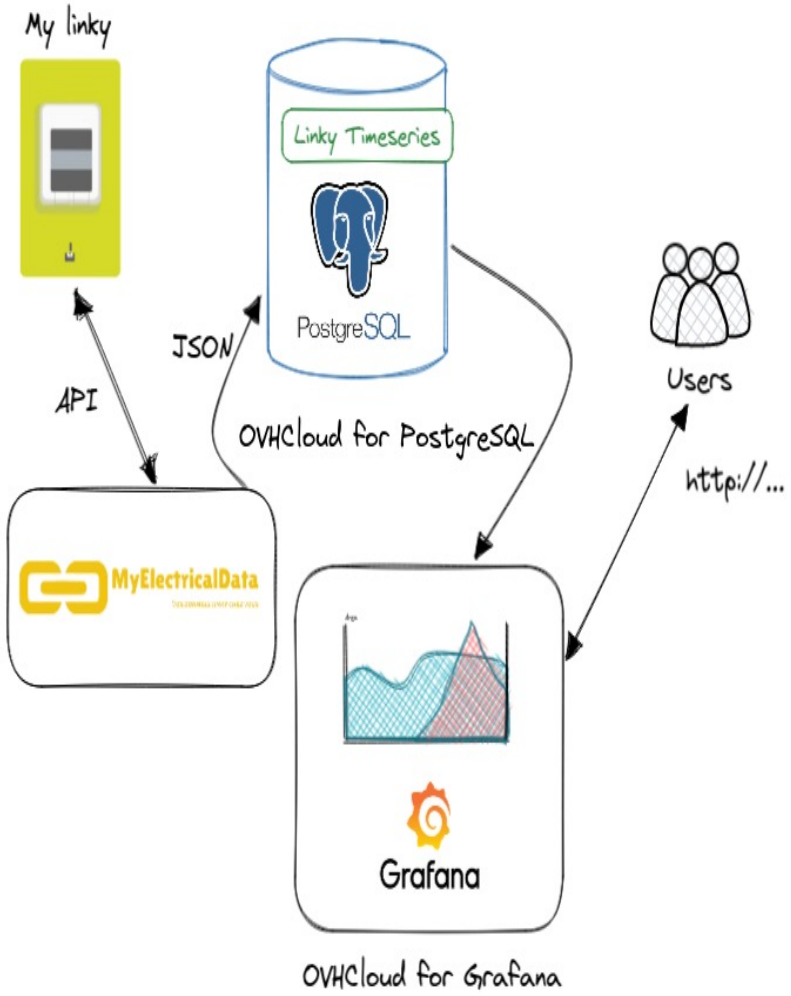
And now ?



Step 3 : visualize my data

- Visualisation database
- Existing dashboard
- Existing with OVHcloud

Open source tools, such as Grafana and Metabase works natively with PostgreSQL.



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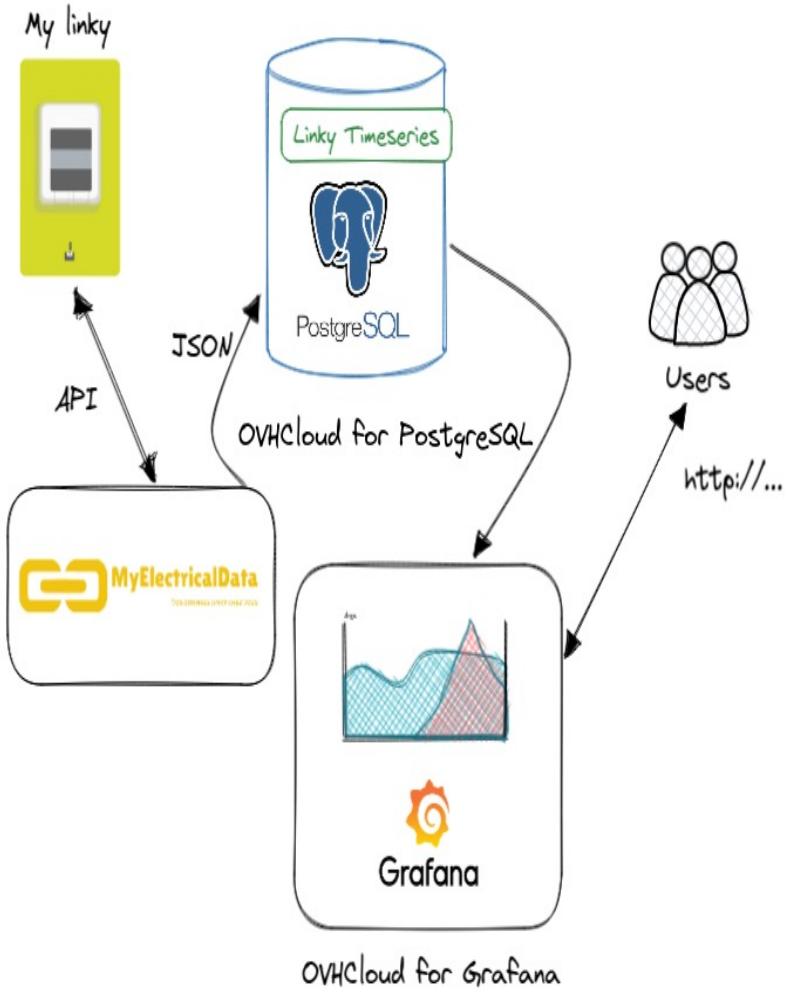
Recap !

- Grafana on OVHcloud, Metabase locally

- PostgreSQL with timestamps

- Python for processing the data

Get the json, process it, store it and display it.



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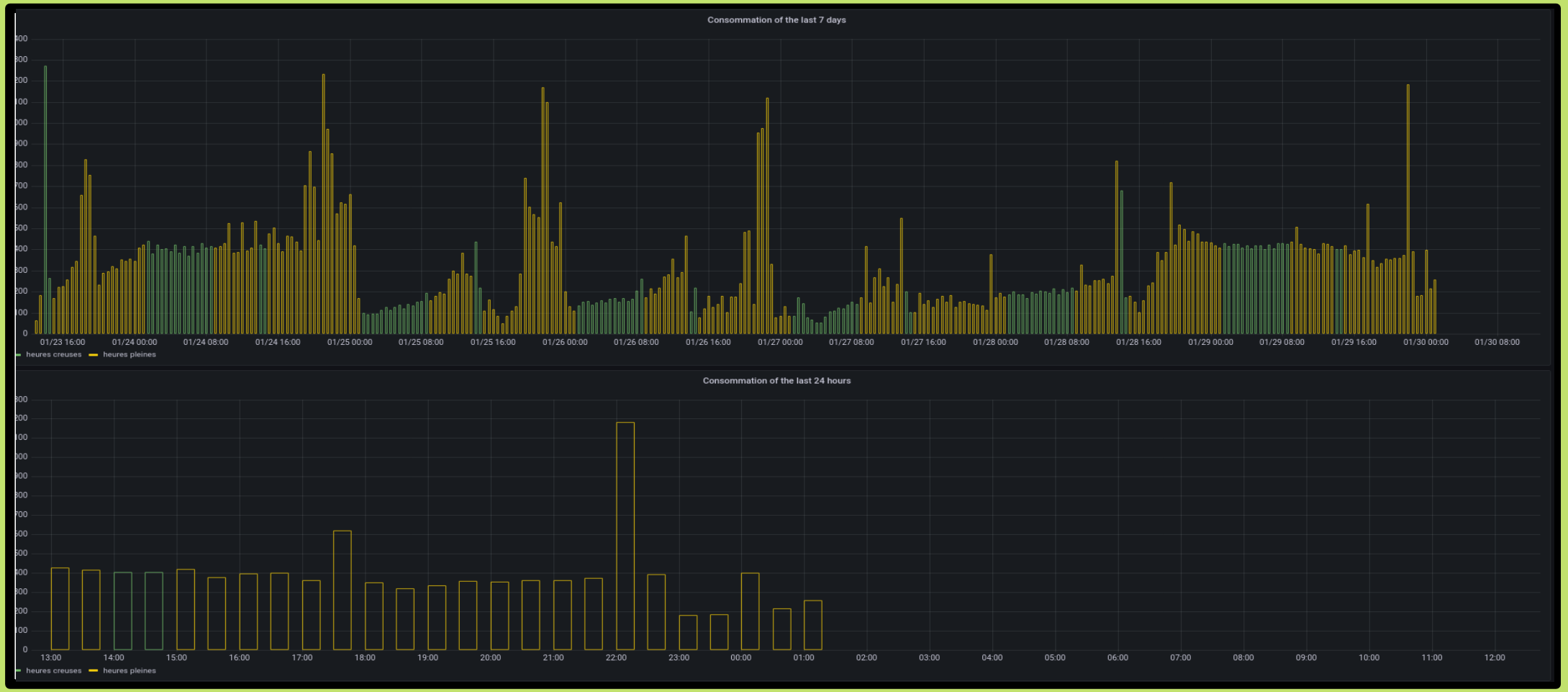
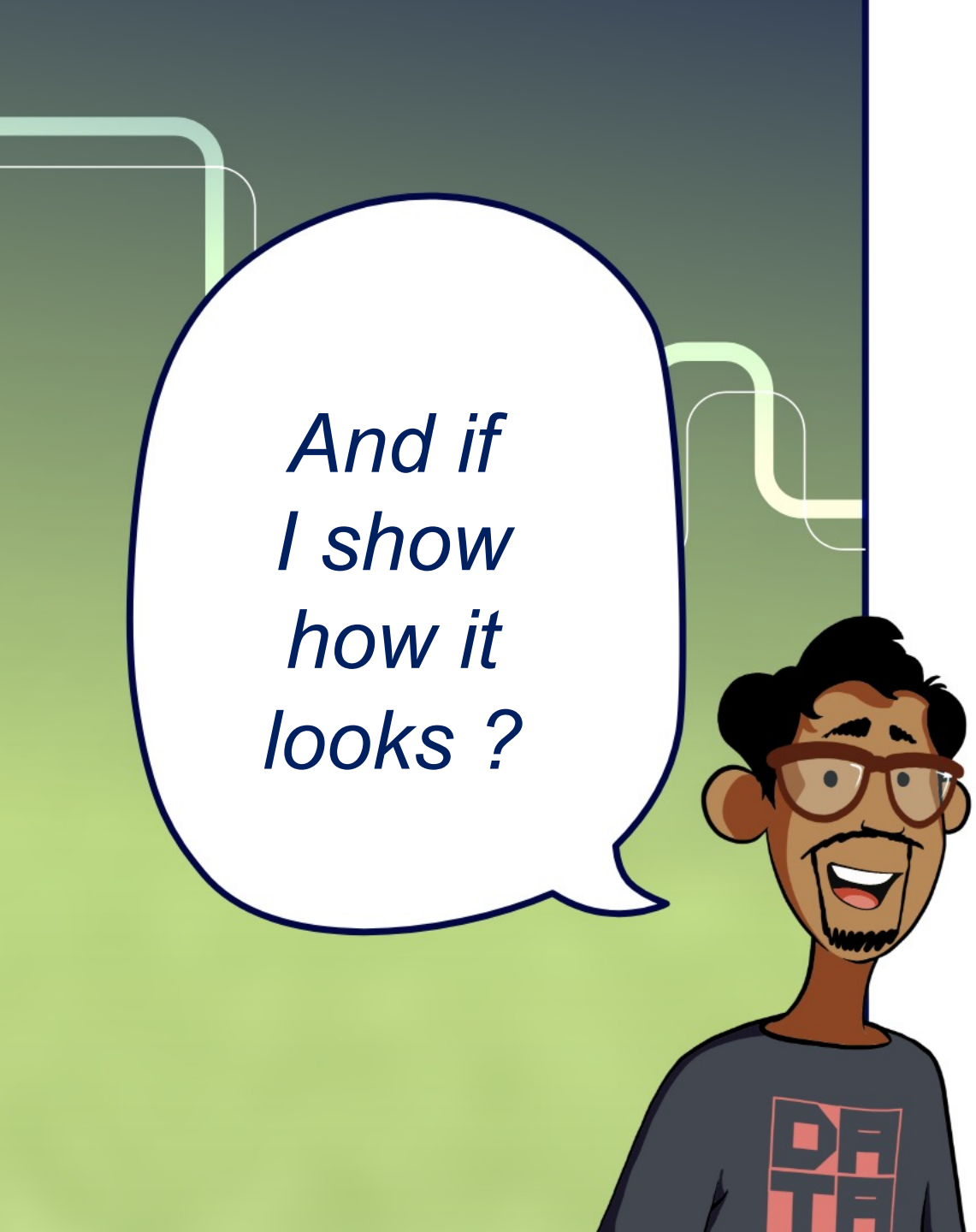
Visualize with Metabase !

- ✓ 30 min timestamp
- ✓ Alerting via email only
- ✓ WYSIWYG Query engine
- ✓ Automatic scaling

Visualize with Grafana !

- ✓ 30 min timestamp
- ✓ Alerting via multiple ways (Telegram,..)
- ✓ Difference with off-peak and peak hours





Demo time !

- Get the data
- Store it
- Display it

Going further and improve my PoC

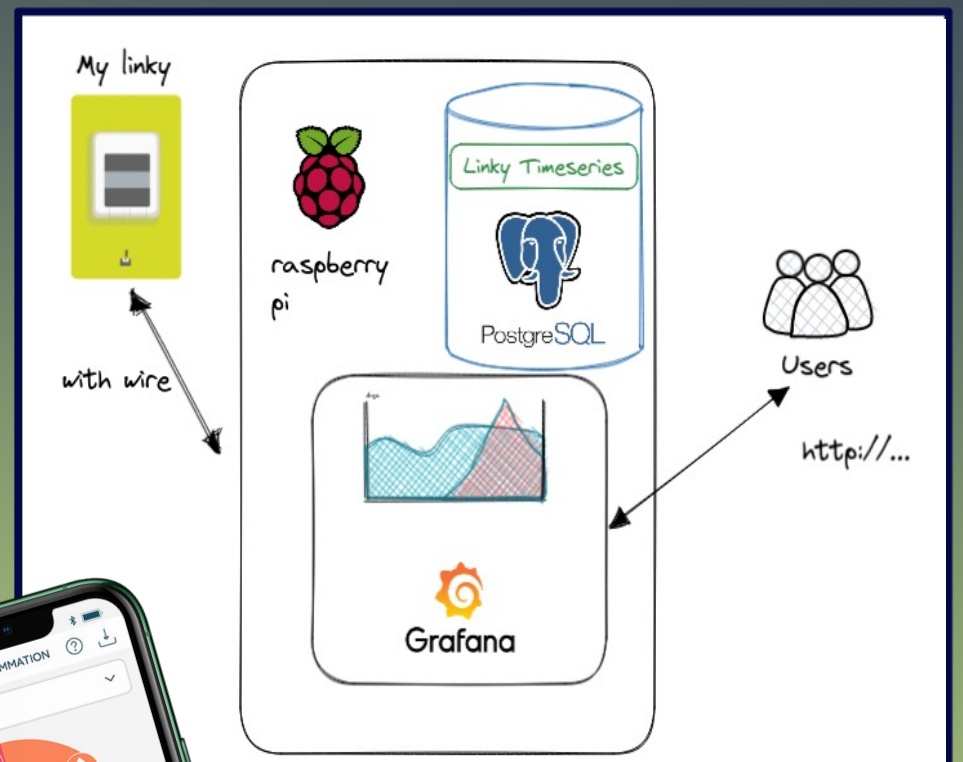
Going further

- Use a **Raspberry Pi** for real time data and zero cloud infra (everything is local)

- **Automate** the Python script

- Send alerts via **Telegram**

- Use specific products such as **Ecojoko** for categorization (heating, fridge, …)



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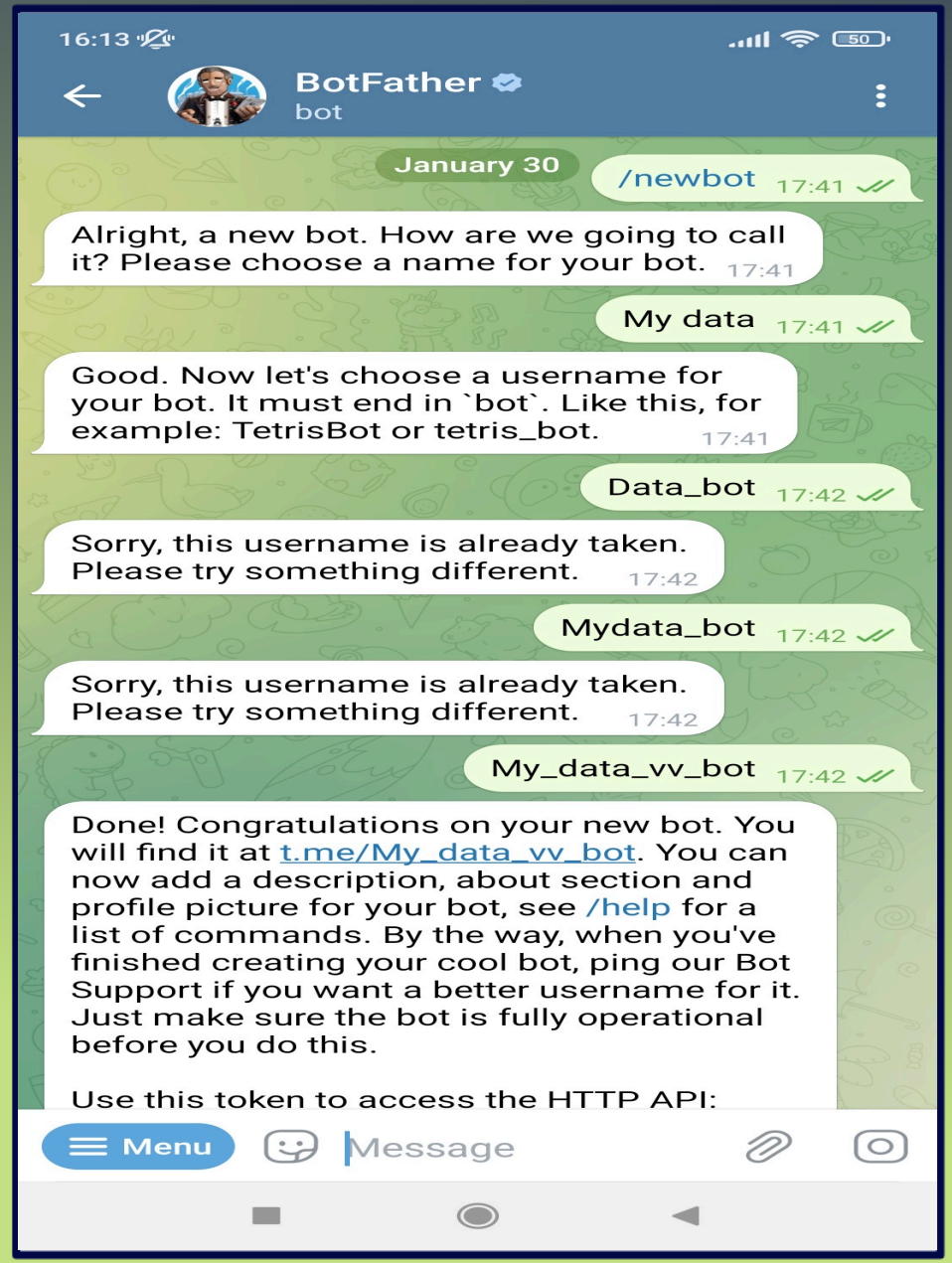
Bonus : Telegram alerting

1/ Create a bot by speaking on Telegram

2/ configure alert in grafana

3/ configure bot in grafana



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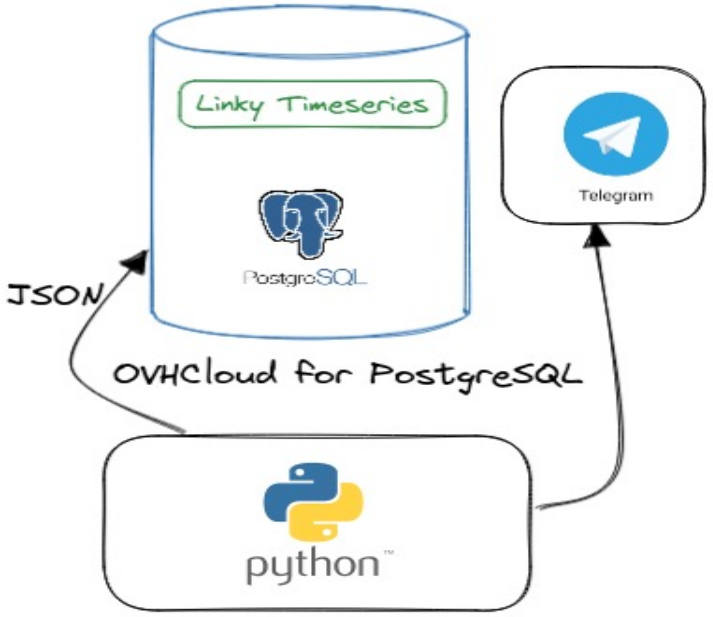
Python to Telegram !

- Goal : Send alerts when your data is added.

Only 5 lines of codes. quite simple !

```
56
57  def telegram_bot_sendtext(bot_message):
58
59      bot_token = str(os.getenv('API_TELEGRAM'))
60      bot_chatID = str(os.getenv('CHAT_ID'))
61      send_text = 'https://api.telegram.org/bot' + bot_token + \
62          '/sendMessage?chat_id=' + bot_chatID + '&parse_mode=Markdown&text=' + bo
63
64      response = requests.get(send_text)
65
66      return response.json()
67
68
69  test = telegram_bot_sendtext("Well done, your data has been added ! ")
70
```



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Thank you !

Find me online :

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